



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,386	01/05/2006	Thilo Schmidt	ZAHFRI P801US	2941
20210 7590 10/16/2007 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER HO, HA DINH	
			ART UNIT 3681	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/563,386	Applicant(s) SCHMIDT ET AL.	
	Examiner Ha D. Ho	Art Unit 3681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/5/06, 3/22/06 & 4/20/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the first Office Action on the merits of Application No. 10/563,386 filed on 01/05/06. Claims 22-42 are currently pending.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because of using the implied phrases, i.e., "The invention relates" (line 1) and "According to the invention" (line 6). Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 35 is objected to because of the following informalities: in line 2, --of-- should be inserted after "periphery". Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 3681

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 22-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 22 recites the limitation “one disk carrier” in line 7. It is unclear as to if the “one disk carrier” refers to the “inner disk carrier” or “outer disk carrier” previously recited in lines 2-3.
- Claim 25 recites the limitation “the disk carrier” in line 6. It is unclear as to if the “disk carrier” refers to the “inner disk carrier” or “outer disk carrier” previously recited in claim 22, lines 2-3.
- Claim 33 recites the limitation “the second actuation piston” in line 4. There is insufficient antecedent basis for this limitation in the claim.
- Claim 33 recites the limitation “the pressure space” in line 5. There is insufficient antecedent basis for this limitation in the claim.
- Claim 37, line 4, the recitation of “a synchronization device” constitutes a double inclusion since it was previously recited in claim 22, line 9.
- Claim 39 recites the limitation “the component” in line 4. There is insufficient antecedent basis for this limitation in the claim.
- Claim 40 recites the limitation “the first actuation piston” in line 2. There is insufficient antecedent basis for this limitation in the claim.
- Claim 41 recites the limitation “the two actuation pistons” in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 22, 23, 27, 38 and 39 are rejected under 35 U.S.C. 102(b) as being anticipated by Forsyth (US 5,975,263).

Forsyth teaches an automatic gearbox for a vehicle, with at least one hydraulically actuated shifting element (128, 132) made as a transmission clutch, which comprises an inner disk carrier (40) and an outer disk carrier (106) on which, respectively, inner disks (132) and outer disks (128) are arranged rotationally fixed but axially displaceable, the inner and outer disks being arranged alternating, one after another, to form a disk pack which is actuatable by an axial actuation force of an actuator (152, 114, 112, 120) to close the shifting element (128, 132), and in which the outer disk carrier (106) is connected to one of a non-rotating component (34) and the inner disk carrier (40) is connectable, via a synchronization device (66), to rotating gearbox components (38, 72), and the synchronization device (66) is actuatable by a second actuator (146).

Regarding claim 23, wherein the synchronization device (66) comprises at least one of a positive-locking element and a frictional element.

Regarding claim 27, wherein the second actuator (146) is formed as a shifting fork of a control positioning device (142) which engages in a circumferential groove of a sliding sleeve (90).

Regarding claim 38, wherein a projection (right portion of element 120), extending axially away from a pressure space (on left side of element 120) of a piston-cylinder arrangement (112,

Art Unit: 3681

120), is formed on a first actuation piston (120) by which one of the inner and outer disks (128, 132) of the shifting element can be acted upon by an actuation force of the first actuation piston (120).

Regarding claim 39, wherein instead of a synchronization ring (this is not part of the structure being claimed), one of an additional small, electro-mechanically actuated disk clutch (couple inner and outer plates on the left of the clutch pack 128 and 132) is arranged between the inner and outer disk carrier (40, 106) and the rotating gearbox component (38).

Allowable Subject Matter

9. Claims 24-2628-37 and 40-42 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Cited Prior Art

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Boardman et al'372, Richardson'052, and Beckerman'911 which each shows a transmission including at least one clutch and a synchronizer.

Communication

11. Submission of your response by facsimile transmission is encouraged. The fax phone numbers for the organization where this application or proceeding is assigned are **(571) 273-8300**. Recognizing the fact that reducing cycle time in the processing and examination of patent applications will effectively increase a patent's term, it is to your benefit to submit responses by facsimile transmission whenever permissible. Such submission will place the response directly in our examining group's hands and will eliminate Post Office processing and delivery time as well as the PTO's mail room processing and delivery time. For a complete list of correspondence not permitted by facsimile transmission, see M.P.E.P. 502.01. In general, most responses and/or amendments not requiring a fee, as well as those requiring a fee but charging such fee to a deposit

Art Unit: 3681

account, can be submitted by facsimile transmission. Responses requiring a fee which applicant is paying by check should not be submitting by facsimile transmission separately from the check. Responses submitted by facsimile transmission should include a Certificate of Transmission (M.P.E.P.. 512). The following is an example of the format the certification might take:

I hereby certify that this correspondence is being facsimile transmitted to
the Patent and Trademark Office on _____

(Date)

Typed or printed name of person signing this certificate:

(Signature)

If your response is submitted by facsimile transmission, you are hereby reminded that the original should be retained as evidence of authenticity (37 CFR 1.4 and M.P.E.P.. 502.02). Please do not separately mail the original or another copy unless required by the Patent and Trademark Office. Submission of the original response or a follow-up copy of the response after your response has been transmitted by facsimile will only cause further unnecessary delays in the processing of your application; duplicate responses where fees are charged to a deposit account may result in those fees being charged twice.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha D. Ho whose telephone number is **571-272-7091**. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on **571-272-7095**.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/HDH/
(571) 272-7091
October 11, 2007

/Ha D. Ho/
Primary Examiner, A.U. 3681